

REMARKS

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims and the following remarks.

Status of the Claims

Claims 1-3, 5-8, 12, 13 and 17-19 are currently pending in the present application. The Office Action is Final. Claims 1, 5, 12, 17 and 19 have been amended without prejudice or disclaimer. No new matter has been added by way of the Amendment, because the amendments are supported by the present specification. Claims 4, 9-11, 14-16 and 20-21 have been cancelled without prejudice or disclaimer.

Based upon the above considerations, entry of the present Amendment is respectfully requested.

Claim Objections

Claims 12, 13 and 17 were objected to due to reciting "comprising of the amino acid sequence". Applicants amended claims 12 and 17, without prejudice or disclaimer, to recite "comprising the amino acid sequence" as the Examiner suggested. As the Examiner noted in Item 22 on page 12 of the outstanding Office Action (dated October 18, 2007; hereinafter "Office Action"), the subject matter of claims 12, 13 and 17 appears to be allowable over the prior art of the record. In view of the amendments to claim 12 and 17, Applicants respectfully

request reconsideration and withdrawal of the present objection. Applicants also respectfully request that claims 12, 13 and 17 be allowed.

Rejection Under 35 U.S.C §112, Second Paragraph, Indefiniteness

Claims 1-3, 5-6, 10-11, 14 and 19-21 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

Claims 10-11, 14 and 20-21 have been cancelled herein without prejudice or disclaimer, thus obviating the rejection as to these claims. Applicants traverse the rejection as to the remaining claims as set forth herein.

Applicants have amended the claims, without prejudice or disclaimer to include the limitations of claims 19 and 21 within claims 1, 5 and 19. The claims are now clearly defined in that the deletions, substitutions or additions are delineated. Because the claims are now not unlimited, one skilled in the art is able to know what the 1 to 10 amino acid deletions, substitutions, or additions within SEQ ID NO.: 2 indicate.

Applicants respectfully request reconsideration and subsequent withdrawal of the present rejection.

Rejection Under 35 U.S.C. § 112, First Paragraph, Written Description

Claims 1-3, 5-6, 10-11 and 14-16 stand rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement. The Examiner suggests that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 10-11 and 14-16 have been cancelled herein without prejudice or disclaimer, thus obviating the rejection as to these claims. Applicants traverse the rejection as to the remaining claims as set forth herein.

Since claims 19 and 21 were not rejected for lacking adequate written description, Applicants amended, without prejudice or disclaimer, the claims limitations of claims 19 and 21 into claims 1, 5 and 19. Applicants believe that with these amendments, the present claims define the subject matter in such a way that it communicates to one skilled in the art that at the time of filing the Applicants were in possession of the claimed invention.

Therefore, Applicants respectfully request reconsideration and subsequent withdrawal of the present rejection.

Rejection Under 35 U.S.C. § 112, First Paragraph, Enablement

Claims 1-3, 5-6, 10-11, 14-16 and 18-20 stand rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the enablement requirement.

The Examiner suggests that while the specification is enabled for a nucleic acid encoding the polypeptide of SEQ ID NO: 2, vectors and isolated host cells comprising nucleic acids, the specification does not reasonably provide enablement for any gene encoding any scytalone dehydratase, any vector or transformant comprising the above gene, kits comprising primers having any structure, kits comprising any oligonucleotide encoding a valine residue, or any non-isolated host cell or transgenic multicellular organism comprising a nucleic acid encoding the polypeptide of SEQ ID NO: 2.

Claims 10-11, 14-16 and 20 have been cancelled herein without prejudice or disclaimer, thus obviating the rejection as to these claims. Applicants traverse the rejection as to the remaining claims as set forth herein.

Since claim 21 was not rejected for failing the enablement requirement, Applicants amended, without prejudice or disclaimer, the claims limitations of claim 21 into claims 1, 5 and 19. Applicants believe that with these amendments, the present claims define the subject matter in such a way that one skilled in the art would be able to take SEQ ID NO.:2 and either delete, substitute, or add 1 to 10 amino acids and practice the present invention.

In light of the above, Applicants respectfully request reconsideration and subsequent withdrawal of the present rejection.

Rejection Under 35 U.S.C. § 102(b), Anticipation

Claim 1-3, 5-6, 10-11, 14-16 and 19-21 stand rejected under 35 U.S.C. § 102(b) as anticipated by Motoyama *et al.*, *Biosci. Biotechnol. Biochem.* 62(3):564-566, 1998 (hereinafter "Motoyama *et al.*") as evidenced by Nakasako *et al.*, *Biochemistry* 37:9931-9939, 1998 (hereinafter "Nakasako *et al.*").

The Examiner asserts that the scytalone dehydratase of Motoyama *et al.* is identical to the polypeptide of SEQ ID NO: 2 except for one amino acid substitution at position 75. According to the Examiner, the hybridization conditions recited are equivalent to a percent identity of approximately 56.6% to SEQ ID NO: 1. Thus, the nucleic acid of Motoyama *et al.* would hybridize under the conditions recited in claims 14-16.

Additionally, the Examiner further asserts that in view of the fact that the scytalone dehydratase polypeptide of Motoyama *et al.* is nearly identical to the polypeptide of SEQ ID NO: 2 the nucleic acid of Motoyama *et al.* anticipate claims 20-21.

Claims 10-11, 14-16 and 20-21 have been cancelled herein without prejudice or disclaimer, thus obviating the rejection as to these claims. Applicants traverse the rejection as to the remaining claims as set forth herein.

Applicants have amended the claims, without prejudice or disclaimer, to recite claim limitations that after deletion, substitution or addition of 1 to 10 amino acids in SEQ ID No.: 2, the amino acid at position 75 of SEQ ID NO.: 2 is always methionine. An isolated or purified gene or recombinant vector for a protein of SEQ ID NO.:2 or a protein with a methionine at amino acid position 75 after limited deletion, substitution or additions of amino acids of SEQ ID NO.:2 is different and will not be what is disclosed within Motoyama *et al.* and Nakasako *et al.*

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art.” *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Thus, because of the lack of disclosure of all features as instantly claimed, the rejection in view of Motoyama *et al* and Nakasako *et al.* is overcome.

In regards to a possible obviousness rejection under 35 U.S.C. § 103(a), Applicants believe that there is no motivation to modify Motoyama *et al* and Nakasako *et al*. in light of there disclosures and therefore would be improper.

Applicants respectfully request reconsideration and withdrawal of the present rejection.

In view of the above Amendment, Applicants believe the pending application is in condition for allowance.

CONCLUSION

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Paul D. Pyla, Reg. No. 59, 228, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By

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